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10/050,049	01/17/2002	Juergen Klenk	00280732AA	1142

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EXAMINER	
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ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)	
	10/050,049	KLENK ET AL.	
	Examiner	Art Unit	
	Sergey Datskovskiy	2121	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 31 August 2005.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 22 July 2005 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the claims

Claims 1-26 were originally presented. After the First Non-final Office Action, claims 1, 12, 17, 25 and 26 were amended. Claims 1-26 are still pending in the Instant Application.

Information Disclosure Statement

The Japanese Office Action included in IDS has not been considered because it does not represent a relevant prior art and has no English translation.

Drawings

The drawings were received on July 22, 2005. These drawings are acceptable.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 25-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 25 and 26 are directed to a software module. Such software module describes an abstract algorithm that does not produce any real-world results outside of a computer. One way to overcome this rejection is to make it tangible by specifying that the software module is stored on a computer-readable medium.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by *Binnig et al* European Patent Number (EPN) 0 962 873 A1 "Processing of textual information and automated apprehension of information" (Dec. 8, 1999).

Regarding claim 1:

Binnig et al teaches,

- A computer-implemented method ([0019]) for automatically determining a characterizing strength (C) (Abstract) which indicates how well a text (11) stored in a database (10) ([0051]) describes a query (15) ([0014]), comprising the steps of:

- a) defining a query (15) ([0055]) comprising a query word ([0031])

- b) creating (71) a graph (30) ([0068]) with nodes and links ([0028-0030]), whereby words of the text (11) are represented by the nodes and a relationship between the words is represented by the links

- c) evolving (72) the graph (30) ([0068], evolving is disclosed as an iterative approach allowing to obtain a resulting semantic network that gives the best possible representation of the information carried in the input string) according to pre-defined set of rules ([0020], Predefined rules are disclosed as rules for adjusting the weights according to the given/presumed theme. These weights define the structure of a tree by

representing the degree of association between the two semantical units across a link ([0018], lines 47-50))

- d) determining a neighborhood of the query word ([0078]), the neighborhood comprising those nodes connected through one or more links to the query word and

- e) calculating the characterizing strength (C) based on the neighborhood (page 10, lines 25-46)

Regarding claim 2:

The rejection of claim 2 is the same as that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 2's limitation is taught in *Binnig et al*:

- the characterizing strength (C) is calculated in step e) by counting the number of immediate neighbors of the query word ([0053]), whereby an immediate neighbor is a word that is connected through one link to the query word

Regarding claim 3:

The rejection of claim 3 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 3's limitations difference is taught in *Binnig et al*:

- the database (10) stores a plurality of texts (17) (Fig. 2A, knowledge database, [0018])

Regarding claim 4:

The rejection of claim 4 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 4's limitations difference is taught in *Binnig et al*:

- performing a search to find texts (11, 12, 13) in the database (10) that contain the query word ([0051-0052])

Regarding claim 5:

The rejection of claim 5 is similar to that for claim 4 as recited above since the stated limitations of the claim are set forth in the references. Claim 5's limitations difference is taught in *Binnig et al*:

- the steps b) through e) are repeated (Abstract) for each text (11, 12, 13) that contains the query word (see also [0058], lines 26-30 describing repeating iterative steps of the algorithm)

Regarding claim 7:

The rejection of claim 7 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 7's limitations difference is taught in *Binnig et al*:

- a parser is employed, to create the graph in step b) ([0040-0041])

Regarding claim 8:

The rejection of claim 8 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 8's limitations difference is taught in *Binnig et al*:

- a semantic network generator is employed to create the graph (30) in step b) ([0045])

Regarding claim 9:

The rejection of claim 9 is similar to that for claim 1 as recited above since the stated limitations of the claim are set forth in the references. Claim 9's limitations difference is taught in *Binnig et al*:

- one graph is generated for each sentence in the text ([0040-0041]) and wherein the characterizing strength (C) is calculated for each sentence by performing the steps b) through e) ([0058], [0061], [0063])

Regarding claim 10:

The rejection of claim 10 is similar to that for claim 9 as recited above since the stated limitations of the claim are set forth in the references. Claim 10's limitations difference is taught in Binning *et al*:

- the characterizing strength (C) of the text is calculated in dependence on the characterizing strengths (C) of all sentences of the respective text ([0058], second page, lines 35-45, disclosed as computing total fitness)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 6, 16 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Binnig et al* in view of *Goldman et al* "Proximity Search in Databases" (1998).

Regarding claim 6:

Binnig et al teaches,

- Method ([0019]) for automatically determining a characterizing strength (C) (Abstract) which indicates how well a text (11) stored in a database (10) ([0051]) describes a query (15) ([0014]), comprising the steps of:

- a) defining a query (15) ([0055]) comprising a query word ([0031])

- b) creating (71) a graph (30) ([0068]) with nodes and links ([0028-0030]), whereby words of the text (11) are represented by the nodes and a relationship between the words is represented by the links

- c) evolving (72) the graph (30) ([0068], evolving is disclosed as an iterative approach allowing to obtain a resulting semantic network that gives the best possible representation of the information carried in the input string) according to pre-defined set of rules ([0020], Predefined rules are disclosed as rules for adjusting the weights according to the given/presumed theme. These weights define the structure of a tree by representing the degree of association between the two semantical units across a link ([0018], lines 47-50))

- d) determining a neighborhood of the query word ([0078]), the neighborhood comprising those nodes connected through one or more links to the query word and

- e) calculating the characterizing strength (C) based on the neighborhood (page 10, lines 25-46)

- performing a search to find texts (11, 12, 13) in the database (10) that contain the query word ([0051-0052])

- the steps b) through e) are repeated (Abstract) for each text (11, 12, 13) that contains the query word

However, *Binnig et al* doesn't explicitly teach displaying a list (82) showing the characterizing strength (C) of each text (11, 12, 13) that contains the word while *Goldman et al* teaches,

- displaying a list (82) showing the characterizing strength (C) of each text (11, 12, 13) that contains the word (page 27, right column, Figure 1 and paragraph 2; page 28, paragraph 1)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for quickly finding relevant information (*Goldman et al*, Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Binnig et al* as taught *Goldman et al* for the purpose of quickly finding relevant information.

Regarding claim 16:

The rejection of claim 16 is similar to that for claims 2 and 6 as recited above since the stated limitations of the claim are set forth in the references. Claim 16's limitations difference is taught in *Goldman et al*:

- the characterizing strength (C) of the text is an average (page 29, right column, paragraph 1) calculated by adding the characterizing strengths (C) of all sentences of the respective text, and then dividing the result of the previous step by the number of sentences

Regarding claim 25:

Binnig et al teaches,

- Software ([0040]) module ([0024]) for automatically determining a characterizing strength (C) (Abstract) which indicates how well a text in a database ([0051]) describes a query ([0014]), whereby said software module, when executed by a programmable data processing system ([0001]), performs the steps:

- a) enabling a user to define a query (15) ([0055]) comprising a word ([0031])

- b) creating a graph (71) ([0068]) with nodes and links ([0028-0030]), whereby words of the text (17) are represented by nodes and the relationship between words is represented by means of the links,

- c) evolving (72) the graph (30) ([0068], evolving is disclosed as an iterative approach allowing to obtain a resulting semantic network that gives the best possible representation of the information carried in the input string) according to pre-defined set of rules ([0020], Predefined rules are disclosed as rules for adjusting the weights according to the given/presumed theme. These weights define the structure of a tree by representing the degree of association between the two semantical units across a link ([0018], lines 47-50))

- - d) determining the neighborhood of the word ([0078]), whereby the neighborhood comprises those nodes that are connected through one or a few links to the word, and

- e) calculating the characterizing strength (C) based on the topological structure ([0018-0019]) of the neighborhood (page 10, lines 25-46)

However, *Binnig et al* doesn't explicitly teach displaying the characterizing strength (C)

Goldman et al teaches,

- f) displaying the characterizing strength (C) (page 27, right column, Figure 1 and paragraph 2; page 28, paragraph 1)

Motivation - The portions of the claimed module would have been a highly desirable feature in this art for quickly finding relevant information (*Goldman et al*, Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Binnig et al* as taught by *Goldman et al* for the purpose of quickly finding relevant information.

Regarding claim 26:

Binning in view of Goldman teach the software module of claim 25.

However, Binning and Goldman do not expressly teach a search engine for identifying those texts in a plurality of texts that match the query.

Examiner takes an Official Notice that using a search engine to identify texts matching a certain query was well known in the art at the time the invention was made. (One of the known examples is the Google search engine known since at least 1998.) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a search engine in a software module that determines how well a text

in a database describes a query since Examiner takes Official Notice that using a search engine to identify texts matching a certain query is well known in the art and could be used for fast retrieving of texts matching a specific search pattern.

4. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Binnig et al* in view of *Manelski et al* "A heuristic approach to natural language processing" (May 1965).

Regarding claim 11:

Binnig et al teaches,

- Method ([0019]) for automatically determining a characterizing strength (C) (Abstract) which indicates how well a text (11) stored in a database (10) ([0051]) describes a query (15) ([0014]), comprising the steps of:

- a) defining a query (15) ([0055]) comprising a query word ([0031])

- b) creating (71) a graph (30) ([0068]) with nodes and links ([0028-0030]), whereby words of the text (11) are represented by the nodes and a relationship between the words is represented by the links

- c) evolving (72) the graph (30) ([0068], evolving is disclosed as an iterative approach allowing to obtain a resulting semantic network that gives the best possible representation of the information carried in the input string) according to pre-defined set of rules ([0020], Predefined rules are disclosed as rules for adjusting the weights according to the given/presumed theme. These weights define the structure of a tree by

representing the degree of association between the two semantical units across a link ([0018], lines 47-50))

- d) determining a neighborhood of the query word ([0078]), the neighborhood comprising those nodes connected through one or more links to the query word and

- e) calculating the characterizing strength (C) based on the neighborhood (page 10, lines 25-46)

However, *Binnig et al* doesn't explicitly teach replacing auxiliary verbs with main verbs.

Manelski et al teaches,

- the graph is evolved in step c) (page 4, Figure 1) by replacing auxiliary verbs with main verbs (page 35, last paragraph and page 36, first paragraph)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for establishing meaning equivalence (*Manelski et al*, Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Binnig et al* as taught by *Manelski et al* for the purpose of establishing meaning equivalence.

Regarding claim 12:

The rejection of claim 12 is the same as that for claims 1 and 11 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 13:

The rejection of claim 13 is the same as that for claims 1 and 11 as recited above since the stated limitations of the claim are set forth in the references.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Binnig et al* in view of *Bessho et al* USPN 6,243,670 "Method, apparatus, and computer readable medium for performing semantic analysis and generating a semantic structure having linked frames" (Filed Aug. 31, 1999).

Regarding claim 14:

Binnig et al teaches,

- Method ([0019]) for automatically determining a characterizing strength (C) (Abstract) which indicates how well a text (11) stored in a database (10) ([0051]) describes a query (15) ([0014]), comprising the steps of:

- a) defining a query (15) ([0055]) comprising a query word ([0031])

- b) creating (71) a graph (30) ([0068]) with nodes and links ([0028-0030]), whereby words of the text (11) are represented by the nodes and a relationship between the words is represented by the links

- c) evolving (72) the graph (30) ([0068], evolving is disclosed as an iterative approach allowing to obtain a resulting semantic network that gives the best possible representation of the information carried in the input string) according to pre-defined set of rules ([0020], Predefined rules are disclosed as rules for adjusting the weights according to the given/presumed theme. These weights define the structure of a tree by representing the degree of association between the two semantical units across a link ([0018], lines 47-50))

- d) determining a neighborhood of the query word ([0078]), the neighborhood comprising those nodes connected through one or more links to the query word and

- e) calculating the characterizing strength (C) based on the neighborhood (page 10, lines 25-46)

However, *Binnig et al* doesn't explicitly teach that the subject of the sentence is identified and placed centrally in the graph to produce a tree-like graph structure in which the subject is at the root, prior to carrying out step d).

Bessho et al teaches,

- the subject of the sentence is identified and placed centrally in the graph to produce a tree-like graph structure in which the subject is at the root, prior to carrying out step d) (Detailed Description text, paragraph 2)

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for generating a semantic structure of the natural language sentence text (*Bessho et al,* Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Binnig et al* as taught by *Bessho et al* for the purpose of generating a semantic structure of the natural language sentence text.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Binnig et al* in view of *Feigenbaum et al* "The Handbook of Artificial Intelligence" (September 1989).

Regarding claim 15:

Binnig et al teaches,

- Method ([0019]) for automatically determining a characterizing strength (C) (Abstract) which indicates how well a text (11) stored in a database (10) ([0051]) describes a query (15) ([0014]), comprising the steps of:

- a) defining a query (15) ([0055]) comprising a query word ([0031])

- b) creating (71) a graph (30) ([0068]) with nodes and links ([0028-0030]), whereby words of the text (11) are represented by the nodes and a relationship between the words is represented by the links

- c) evolving (72) the graph (30) ([0068], evolving is disclosed as an iterative approach allowing to obtain a resulting semantic network that gives the best possible representation of the information carried in the input string) according to pre-defined set of rules ([0020], Predefined rules are disclosed as rules for adjusting the weights according to the given/presumed theme. These weights define the structure of a tree by representing the degree of association between the two semantical units across a link ([0018], lines 47-50))

- d) determining a neighborhood of the query word ([0078]), the neighborhood comprising those nodes connected through one or more links to the query word and

- e) calculating the characterizing strength (C) based on the neighborhood (page 10, lines 25-46)

However, *Binnig et al* doesn't explicitly teach determining the number of second neighbors of the query word, whereby a second neighbor is a word that is connected through two links to the query word.

Feigenbaum et al teaches,

- determining the number of second neighbors of the query word, whereby a second neighbor is a word that is connected through two links to the query word (Volume II, page 6, paragraph 2, "Thus, the basic LISP ... to a depleted argument")

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for associating symbols (*Feigenbaum et al*, Volume II, page 7, paragraph 4) allowing nodes to inherit values (*Feigenbaum et al*, Volume I, page 183, paragraph 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Binnig et al* as taught by *Feigenbaum et al* for the purpose of associating symbols and allowing nodes to inherit values in a natural language processing.

7. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Binnig et al* in view of *Braden-Harder et al* United States Patent Number (USPN) 5,933,822 "Apparatus and methods for an information retrieval system that employs natural language processing of search results to improve overall precision" (Aug. 3, 1999).

Regarding claim 17:

Binnig et al teaches,

- A system ([0001]) for automatically determining a characterizing strength (C) (Abstract) which indicates how well a text (17) in a database (10) ([0051]) describes a query (15) ([0014]), the system comprising:

- a database (10) storing a plurality of m texts (Fig. 2A, knowledge database, [0018])

- a calculation engine (18) ([0063]; Fig. 2A-C) for calculating the characterizing strengths (C) of each of the k texts (11, 12, 13) that match the search query (15), by performing the following steps for each such text:

- creating a graph ([0068]) with nodes and links ([0028-0030]), whereby words of the text are represented by the nodes and the relationship between words is represented by the links,

- c) evolving (72) the graph (30) ([0068], evolving is disclosed as an iterative approach allowing to obtain a resulting semantic network that gives the best possible representation of the information carried in the input string) according to pre-defined set of rules ([0020], Predefined rules are disclosed as rules for adjusting the weights according to the given/presumed theme. These weights define the structure of a tree by representing the degree of association between the two semantical units across a link ([0018], lines 47-50))

- determining the neighborhood of the word ([0078]), whereby the neighborhood comprises those nodes that are connected through one or more links to the word, and

- calculating the characterizing strength (C) based on the topological structure ([0018-0019]) of the neighborhood (page 10, lines 25-46)

However, *Binnig et al* doesn't explicitly teach - a search engine (16) for processing a search query (15) in order to identify those k texts (11, 12, 13) from the plurality of m texts (17) that match the search query (15).

Braden-Harder et al teaches,

- the query is a search query (Brief Summary text, paragraph 22)

- a search engine (16) for processing a search query (15) in order to identify those k texts (11, 12, 13) from the plurality of m texts (17) that match the search query (15) (Detailed Description text, paragraph 15)

Motivation - The portions of the claimed system would have been a highly desirable feature in this art for employing natural language processing to improve the accuracy of a keyword-based document search (*Braden-Harder et al*, Brief Summary text, paragraph 21). Additionally, building a semantic tree can be used in the preprocessing step which can save execution time during further natural language processing (Braden-Harder et al., col. 5, line 64 through col. 6, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify *Binnig et al* as taught by *Braden-Harder et al* for the purpose of employing natural language processing to improve the accuracy of a keyword-based document search and for saving execution time by preprocessing a semantic tree.

Regarding claim 18:

The rejection of claim 18 is similar to that for claim 17 as recited above since the stated limitations of the claim are set forth in the references. Claim 18's limitations difference is taught in *Braden-Harder et al*:

- the database (11) is stored in a server (90) connected via a network (94) to a client system (91, 92, 93) (Detailed Description text, paragraphs 40-43)

Regarding claim 19:

The rejection of claim 19 is similar to that for claim 17 as recited above since the stated limitations of the claim are set forth in the references. Claim 19's limitations difference is taught in *Binnig et al*:

- a parser for creating the graph ([0040-0041])

Regarding claim 20:

The rejection of claim 20 is similar to that for claim 17 as recited above since the stated limitations of the claim are set forth in the references. Claim 20's limitations difference is taught in *Binnig et al*:

- a semantic network generator for creating the graph ([0045])

Regarding claim 21:

The rejection of claim 21 is similar to that for claim 17 as recited above since the stated limitations of the claim are set forth in the references. Claim 21's limitations difference is taught in *Binnig et al*:

- the calculation engine calculates the characterizing strength (C) by counting the number of immediate neighbors of the word ([0053]), whereby an immediate neighbor is a word that is connected through one link to the word

Regarding claim 22:

The rejection of claim 22 is similar to that for claim 17 as recited above since the stated limitations of the claim are set forth in the references. Claim 22's limitations difference is taught in *Braden-Harder et al*:

- An information retrieval system (Title; Detailed Description text, paragraph 3) comprising a system as claimed in claim 17

Regarding claim 23:

The rejection of claim 23 is the same as that for claims 17 and 18 as recited above since the stated limitations of the claim are set forth in the references.

Regarding claim 24:

The rejection of claim 24 is the same as that for claims 17 and 18 as recited above since the stated limitations of the claim are set forth in the references.

Response to Arguments

Applicant's arguments filed on July 22, 2005 have been fully considered but they are not persuasive.

Applicant states that Binnig does not teach evolving of the graph or calculation of a characterizing strength (defined in the claims as an indication of how well a text describes a query). However, Binnig teaches evolving the graphs in [0068], where evolving is disclosed as an iterative approach for obtaining a resulting semantic network that gives the best possible representation of the information carried in the input string. Furthermore, Binning teaches a characterizing strength disclosed as fitness in [0022] which corresponds to a classification probability, i.e. probability that the segment or semantical unit from the input string has been correctly matched with a semantical unit in the knowledge database.

Examiner agrees with Applicant's argument about an improper 35 U.S.C. 102 rejection of claims 1-5 and 7-10 based on two references. This error has been corrected by applying new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sergey Datskovskiy whose telephone number is (571) 272-8188. The examiner can normally be reached on Monday-Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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